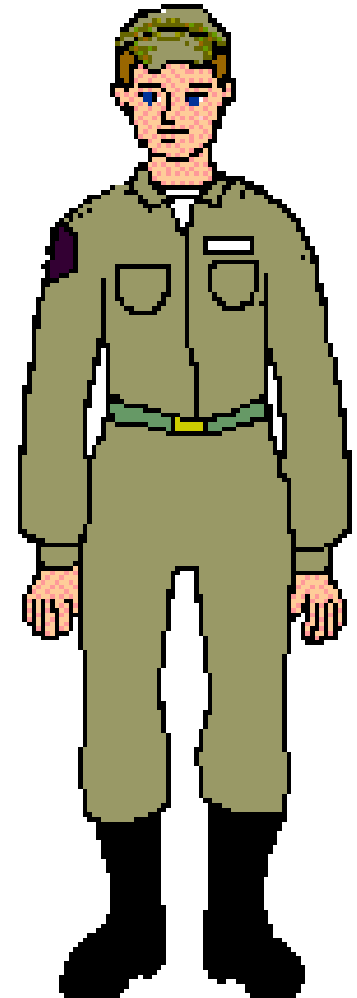




# Armed Forces College of Medicine AFCM



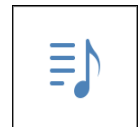


# **Anatomy Department**

## **The Brachial Plexus**

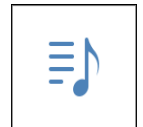
### **BY**

## **Prof. Azza Kamal**



# Intended Learning Outcomes

- **By the end of this lecture, each student should be able to:**
  - 1. Explain the formation, stages and branches of the brachial plexus**



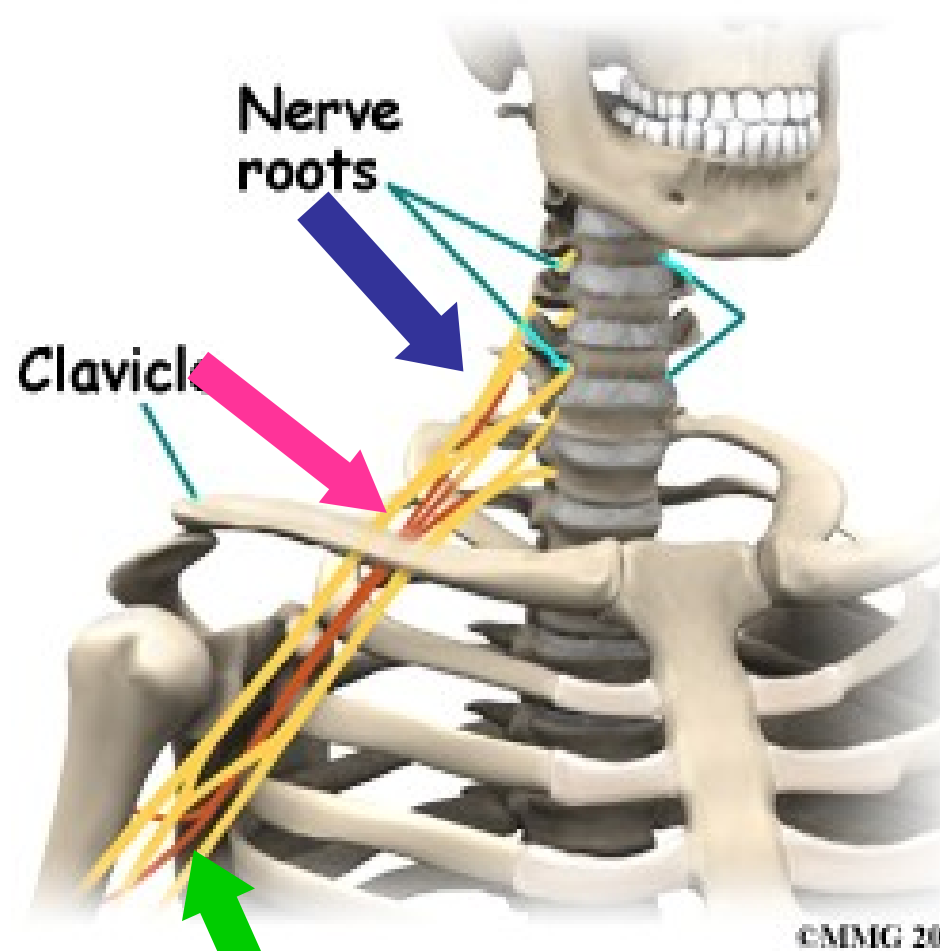
## **Key Points of the Lecture**

- **Formation of the brachial plexus**
- **Stages of the brachial plexus**
- **Branches of the brachial plexus**

- It is a plexus of spinal nerves supplying the upper limb.
- It begins **in the neck** and descends through the **cervicoaxillary canal** to reach the **axilla**.



# Brachial Plexus



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[https://3.googleusercontent.com/4hAJSX\\_t-7HXtRh3Qr9-](https://3.googleusercontent.com/4hAJSX_t-7HXtRh3Qr9-)

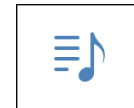
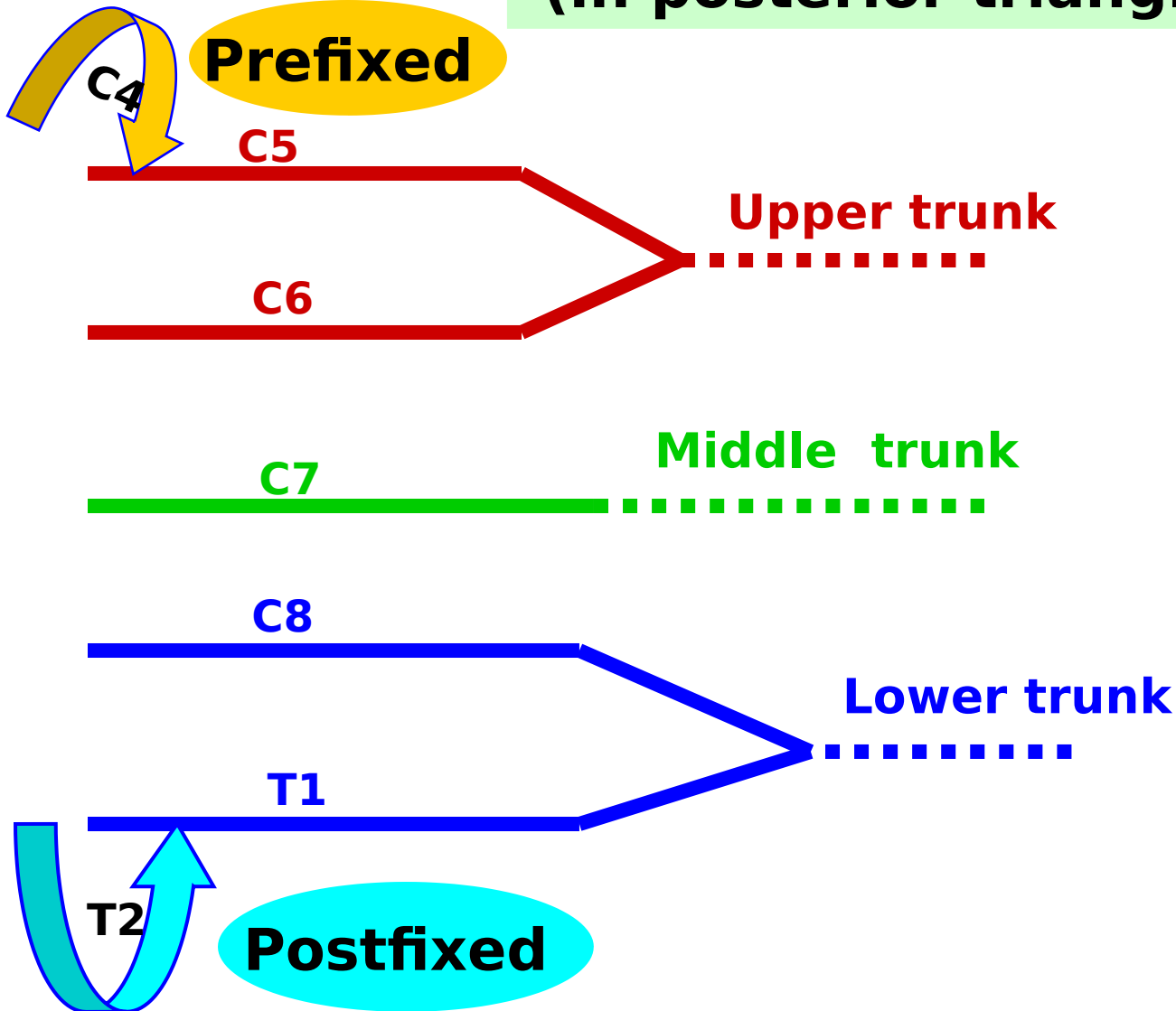
# Stages of Brachial Plexus

- **R**eally **T**ired? **D**rink **C**offee **B**uddy!
- **R = ROOTS** (ventral rami of C5,6,7,8,T1) 
- **T = TRUNKS**
- **D = DIVISIONS**
- **C = CORDS**
- **B = BRANCHES**

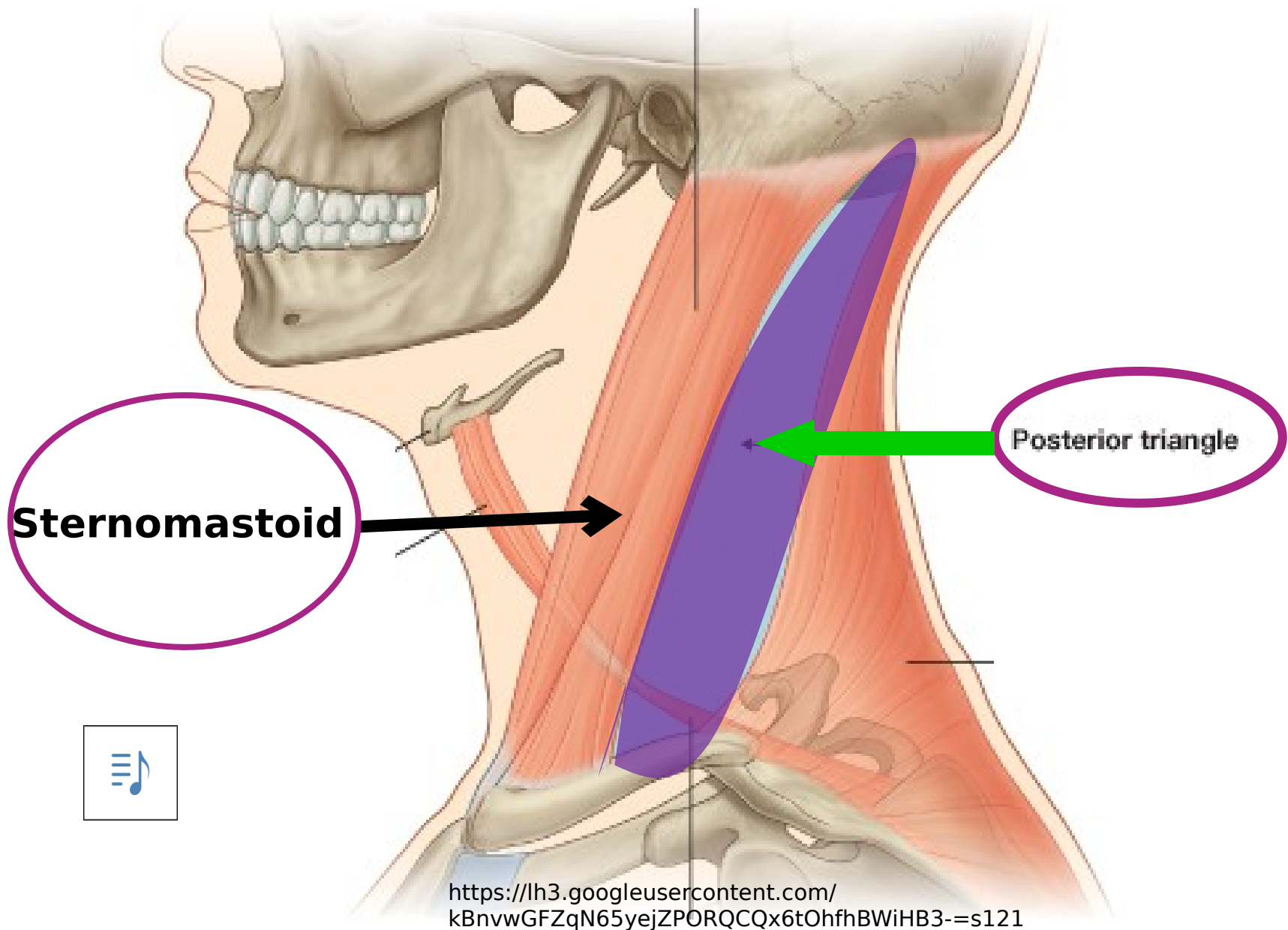
<https://lh3.googleusercontent.com/po7QvVL9>

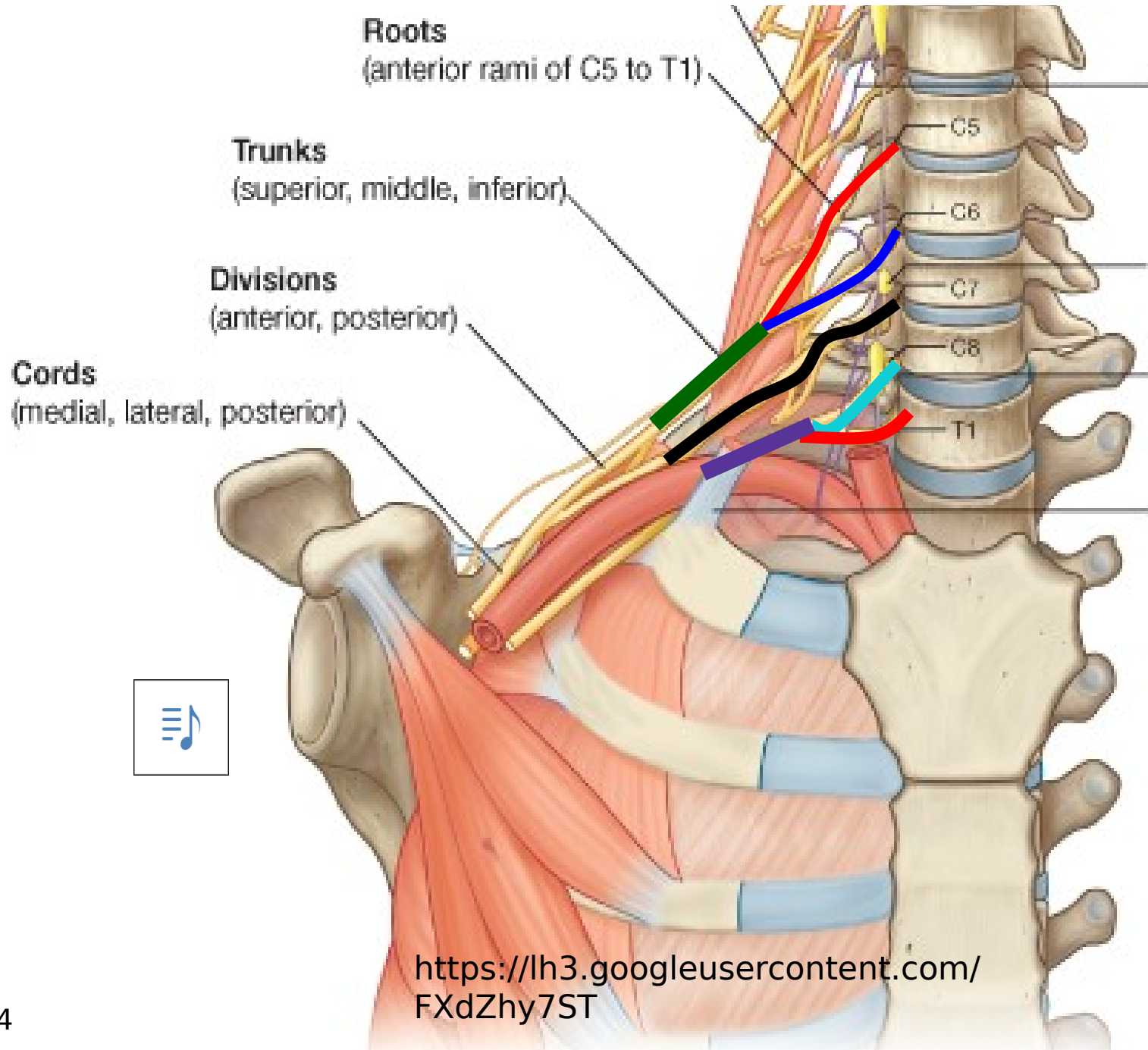
# Ventral rami

Roots join to form Trunks  
(in posterior triangle of neck)









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# Trunks Split to form **Divisions**

( **in cervicoaxillary canal** )

- **Trunks** **Divisions**

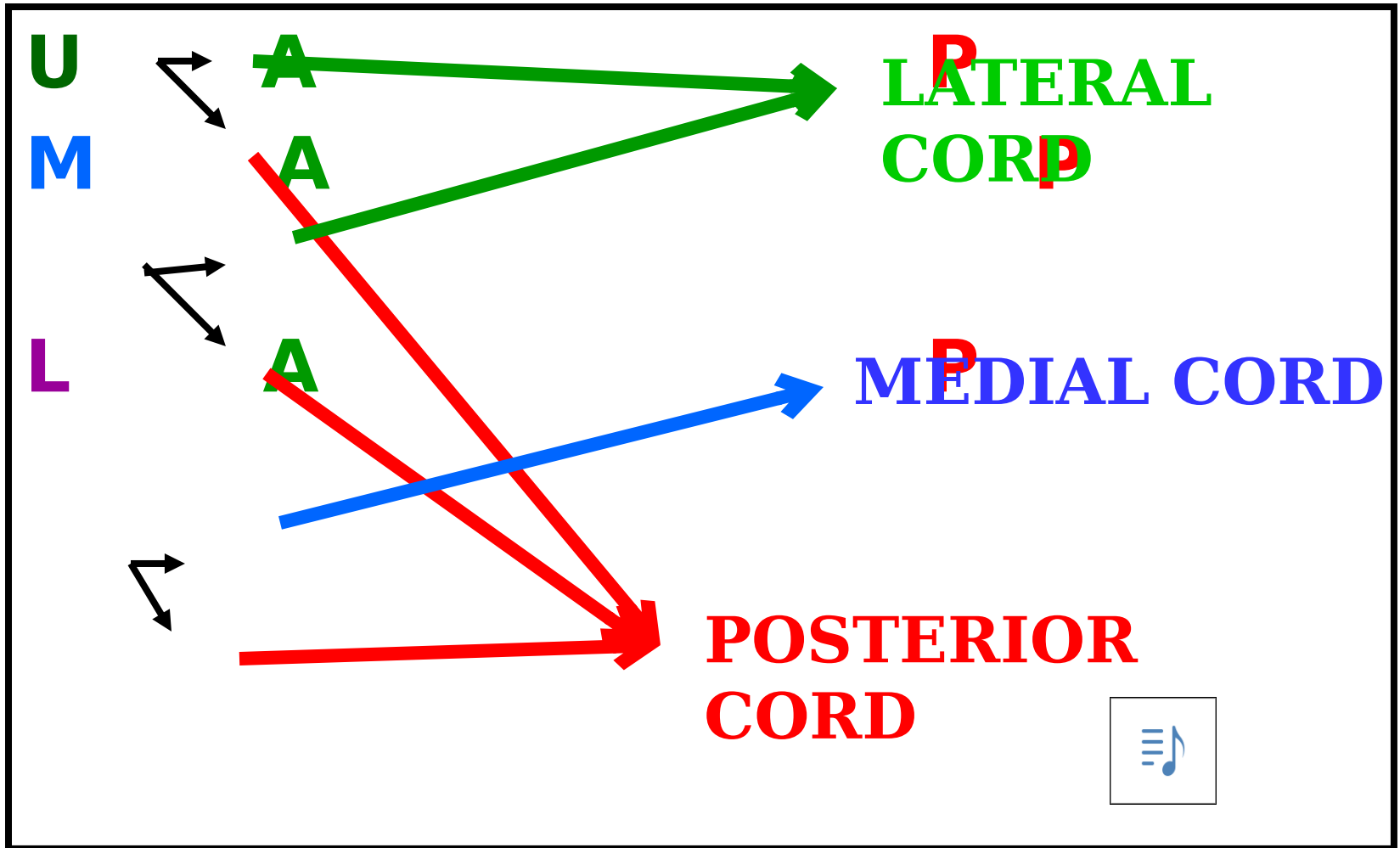
- **Upper**  **Anterior**  
**Posterior**



- **Middle**  **Anterior**  
**Posterior**

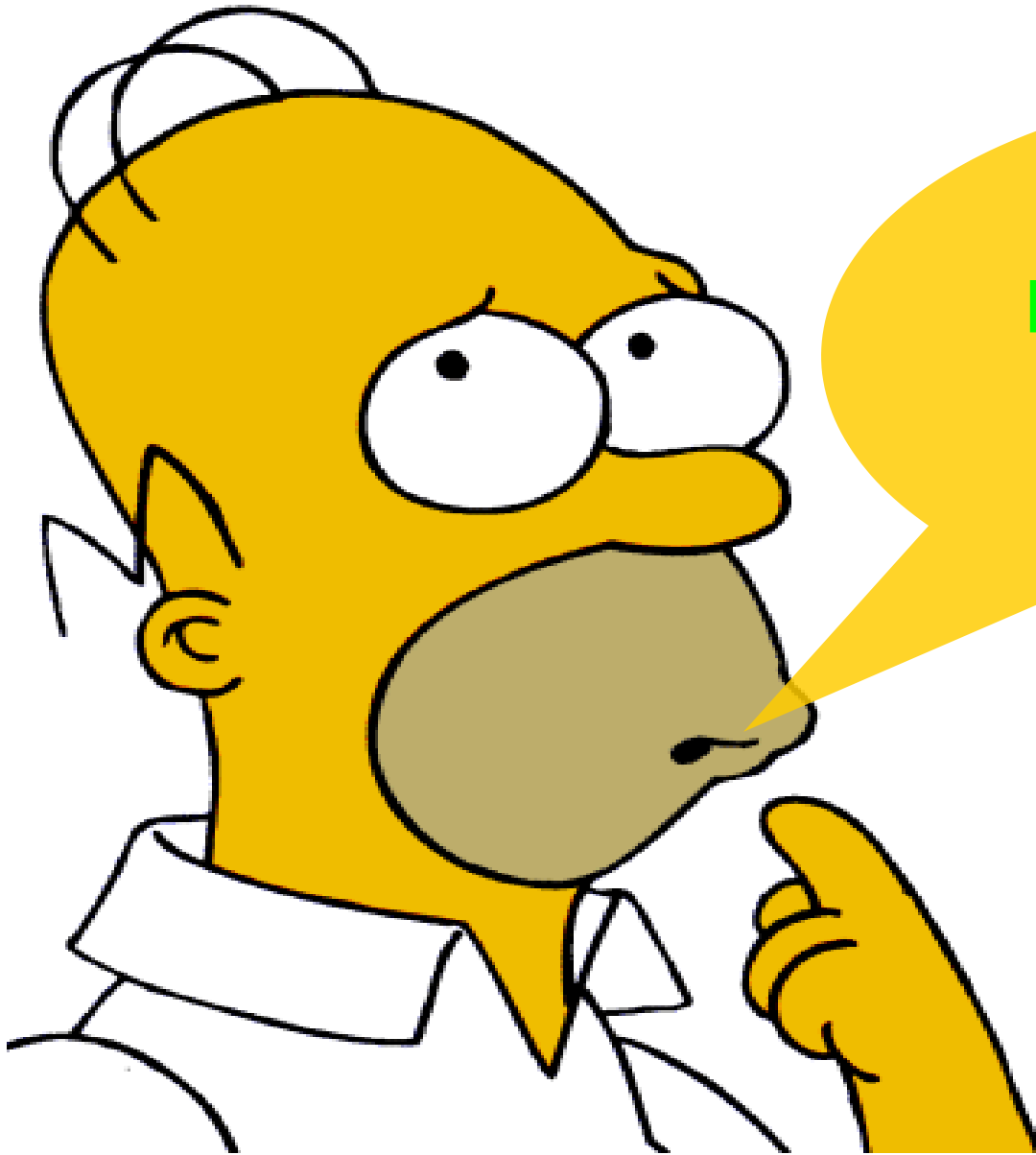
- **Lower**  **Anterior**  
**Posterior**

# Divisions Join to form Cords (in axilla)

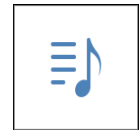


- Each trunk divides into anterior and posterior divisions
- Stage of divisions lies in **cervicoaxillary canal**
- Anterior divisions of upper and middle trunks join to form **lateral cord**
- Anterior division of lower trunk forms **medial cord**
- Posterior divisions of the 3 trunks form **posterior cord**

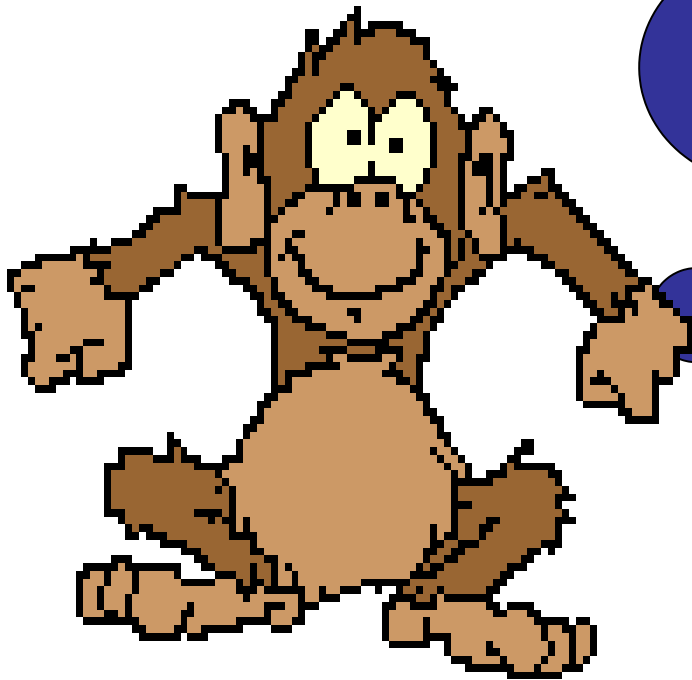




**REMEMBER**  
**Really Tired ?**  
**Drink Coffee**  
**Buddy !!!!**



Now Put  
All Stages  
Together !!!

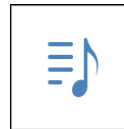
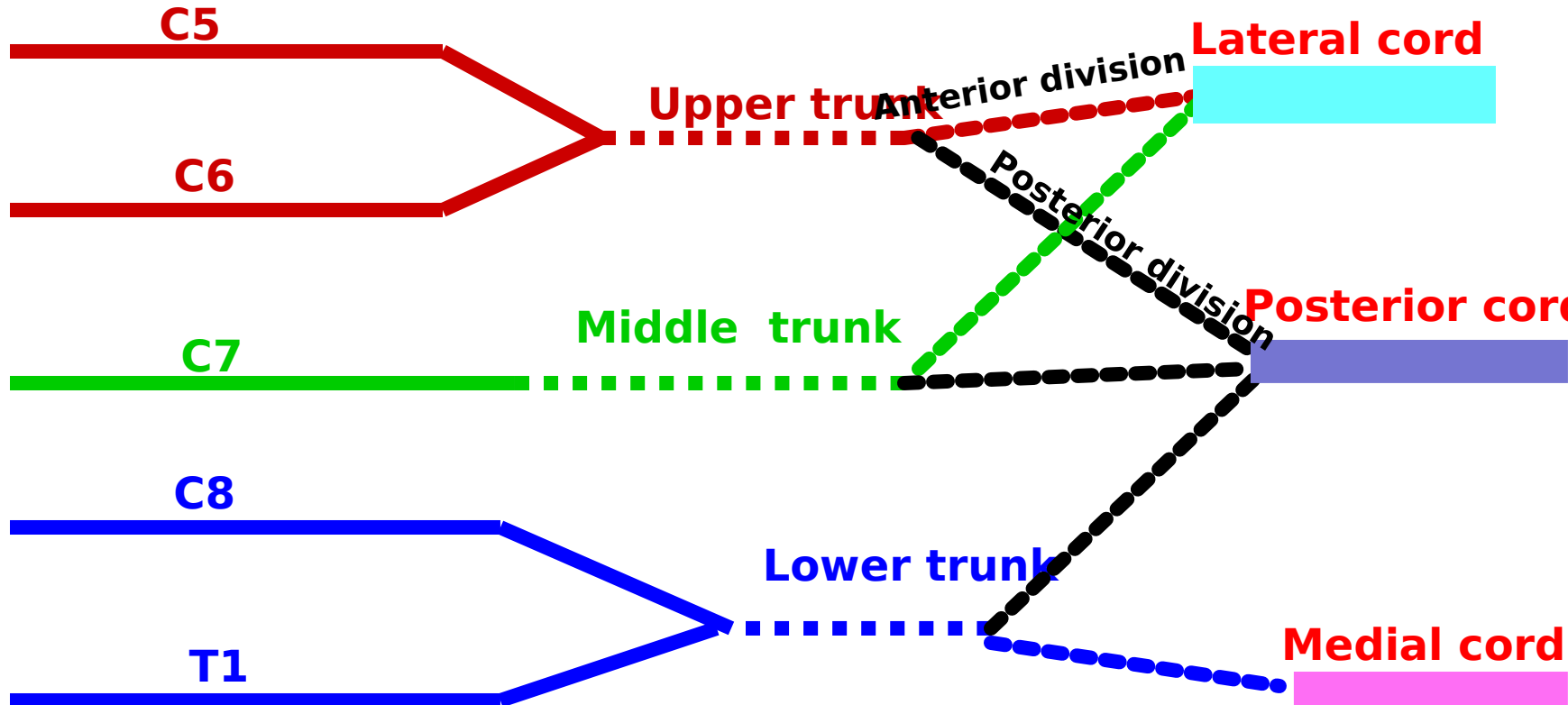


**Roots**  
(in neck)

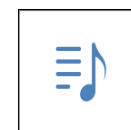
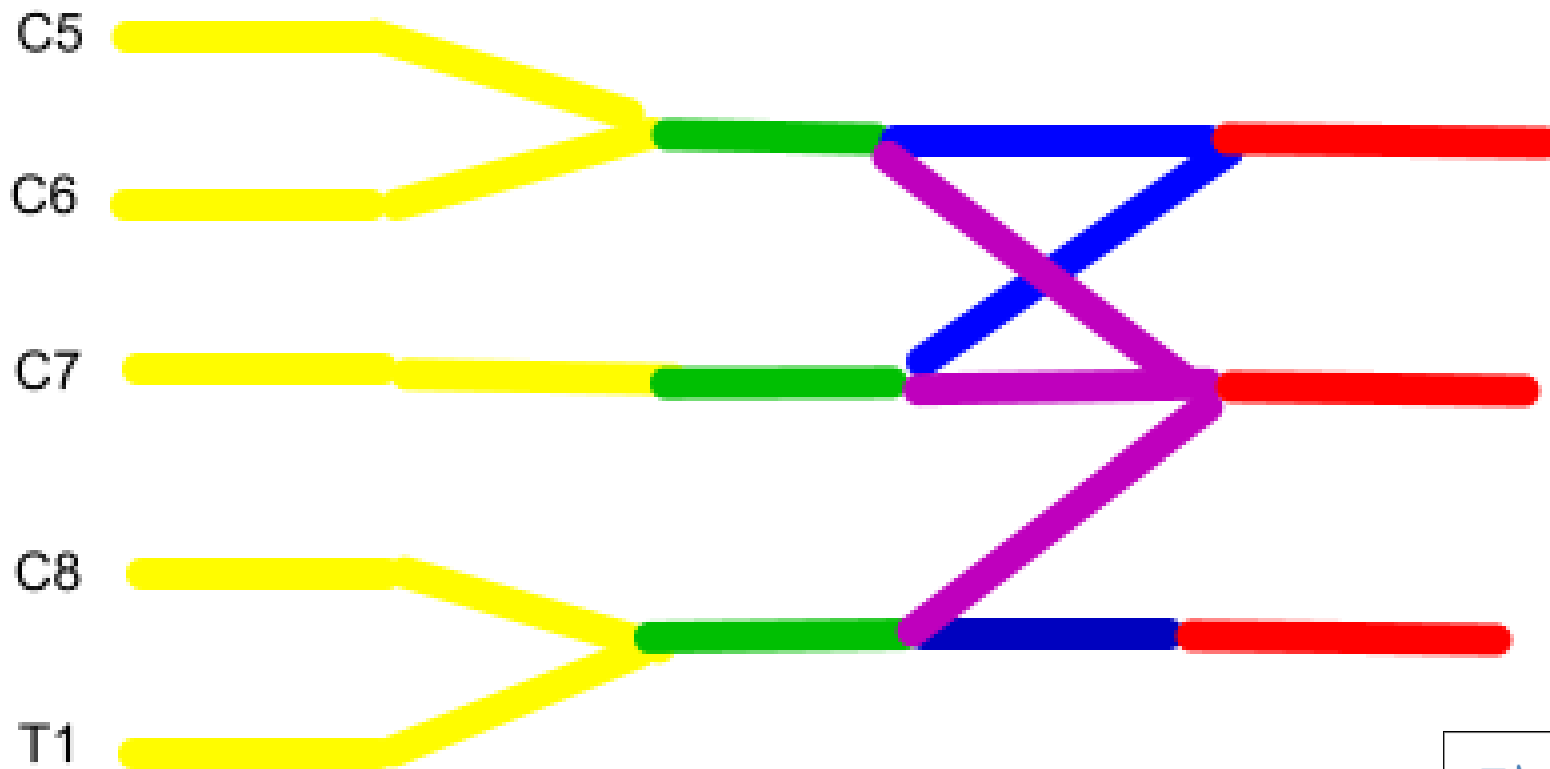
**Trunks**  
(in neck)

**Divisions**  
(in cervicoaxillary canal)

**Cords**  
(in axilla)

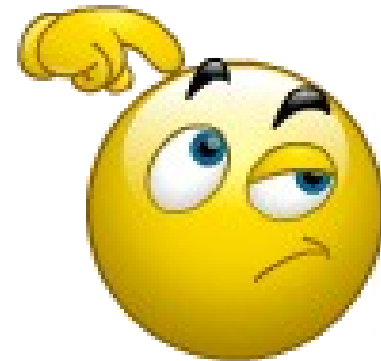






- **Which of the following stages of the brachial plexus lies in the cervicoaxillary canal?**

- A. Roots**
- B. Trunks**
- C. Divisions**
- D. Cords**
- E. Branches from cords**



# Branches of Brachial Plexus

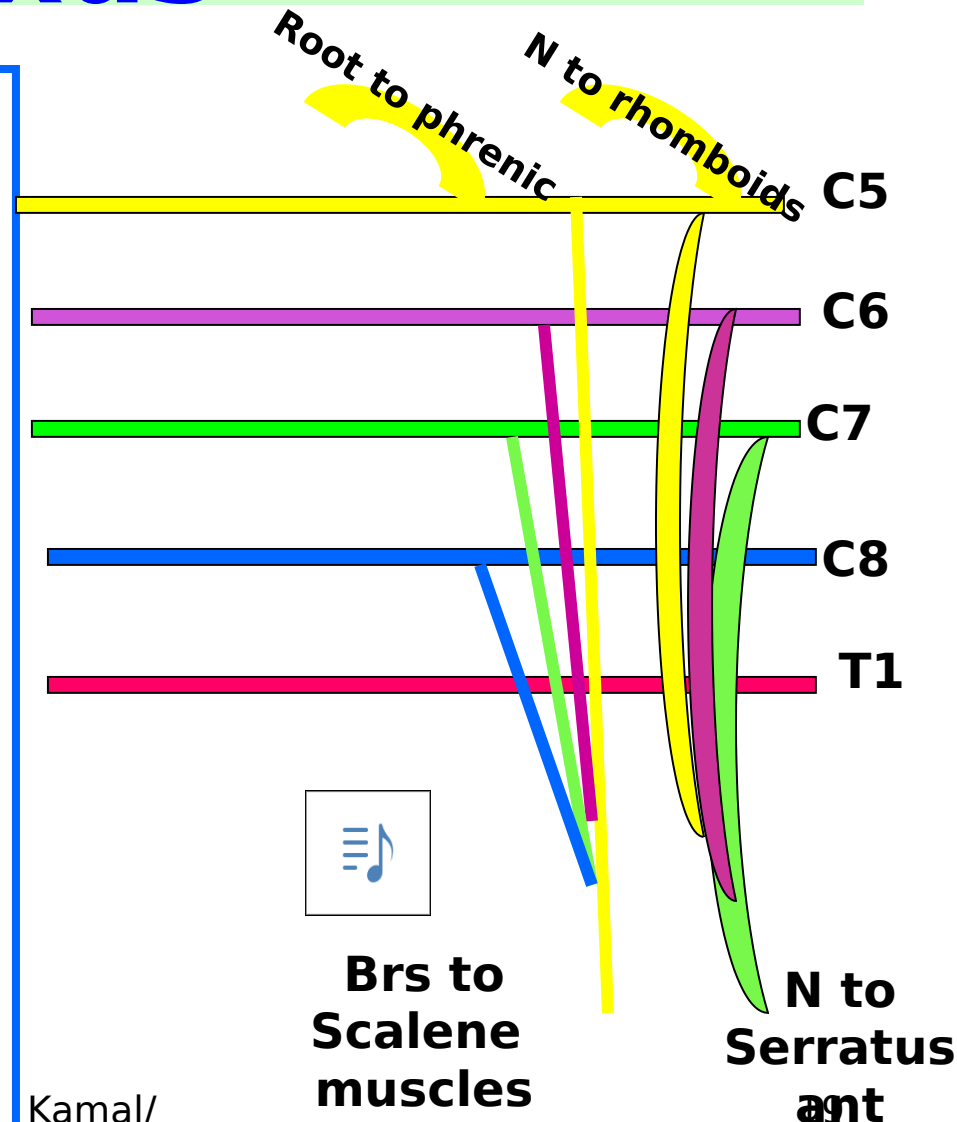
## 1) Branches from roots:

**A. Dorsal scapular  
(n. to rhomboids) C5**

**B. A root to phrenic nerve  
C5**

**C. Long thoracic C5,6,7  
(n. to serratus anterior)**

**D. Muscular brs to  
scalene muscles  
C5,6,7,8**



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# Branches of Brachial Plexus

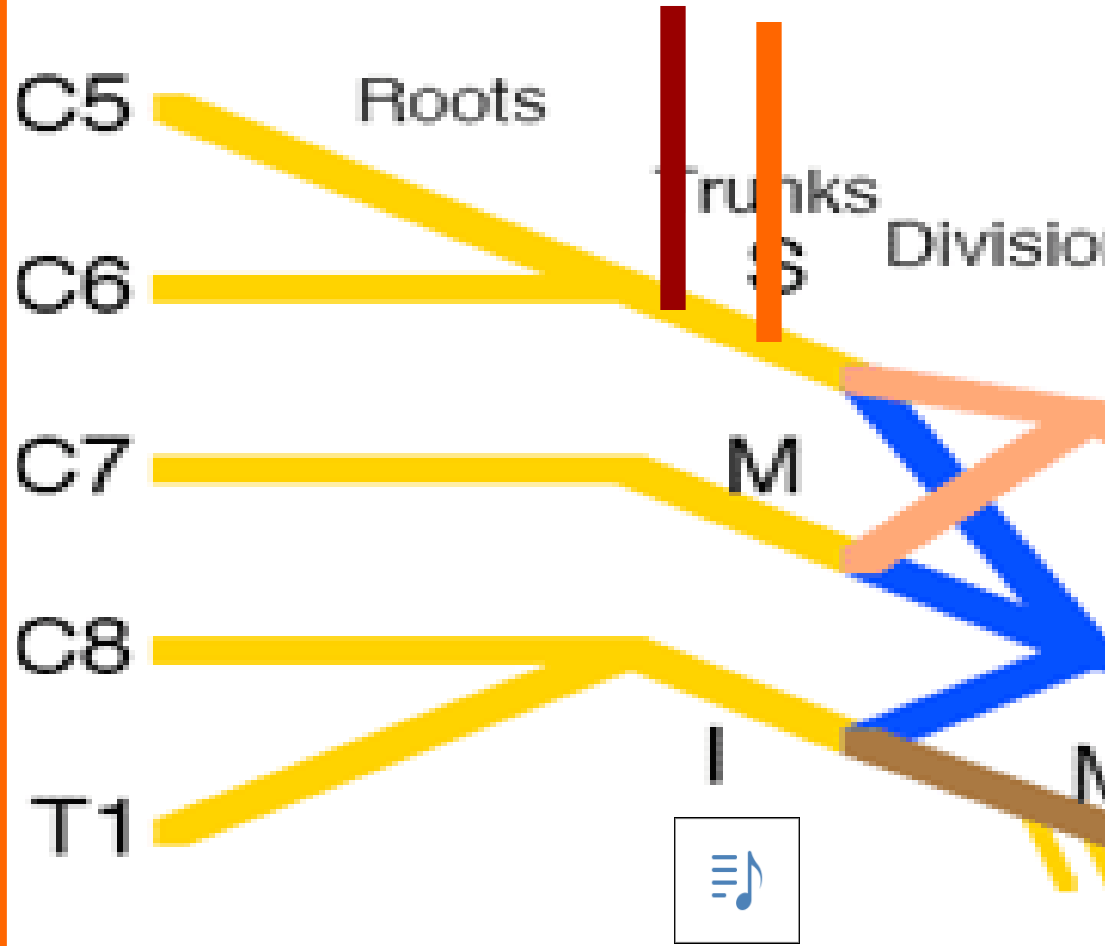
**Branches from  
trunks  
only upper**

**{Superior}**  
trunk gives  
branches :

**A. Suprascapular  
nerve (for  
supraspinatus &  
infraspinatus )**

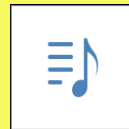
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**B. Nerve to**



- **Branches from divisions :**

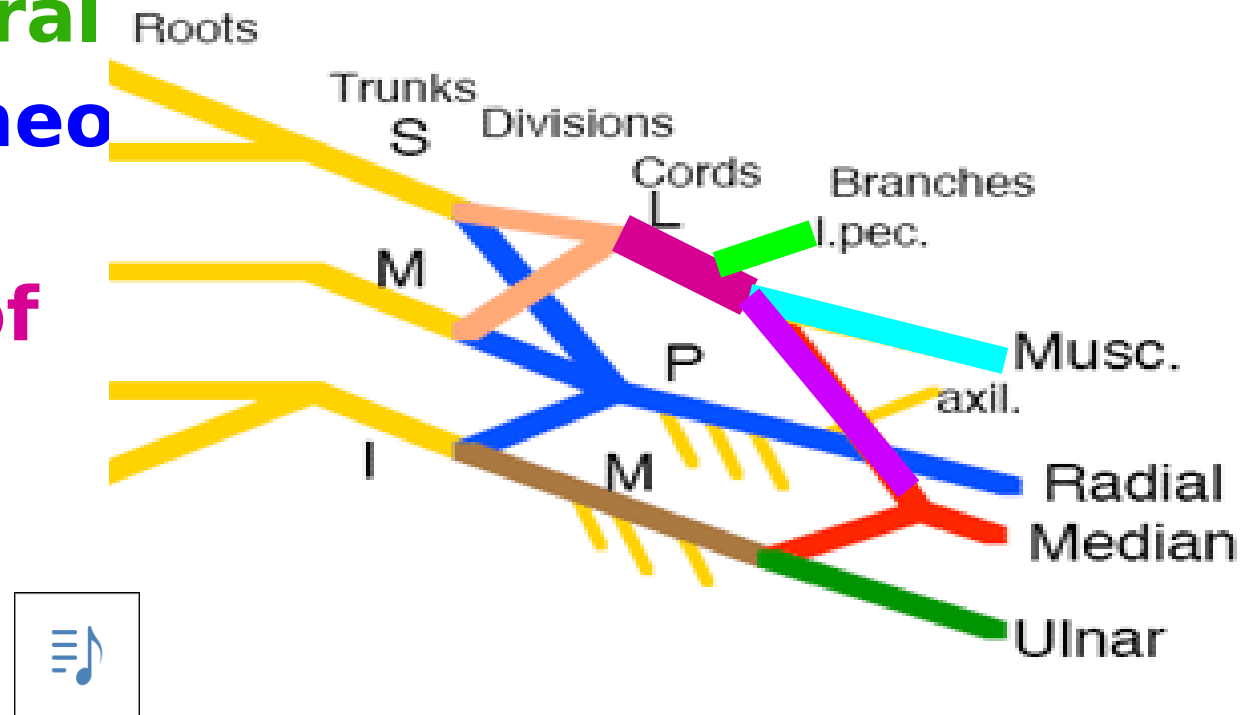
- **DIVISIONS GIVE  
NO BRANCHES**



- **Branches from cords :**

- 1) Lateral cord :**

- **Lateral pectoral**
- **Musculocutaneous**
- **Lateral root of median**



## ➤ Branches from cords:

### 2) Medial Cord:

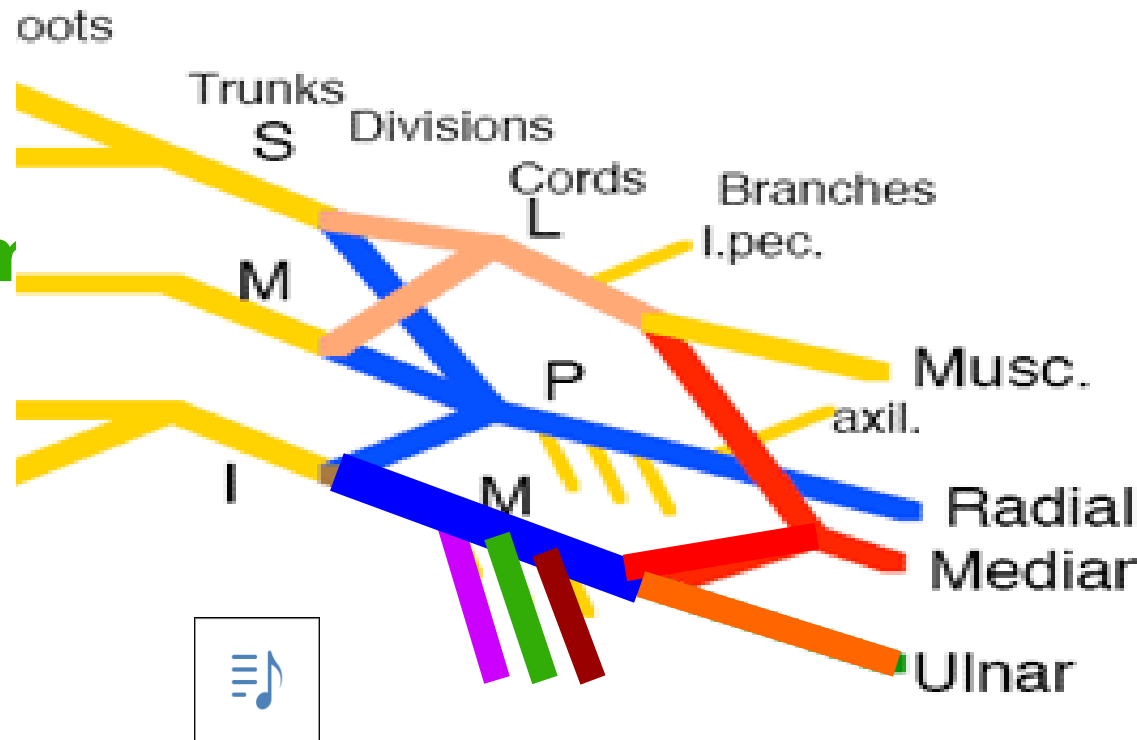
#### ➤ Medial pectoral

#### ➤ Medial cutaneous of arm

#### ➤ Medial cutaneous of forearm

#### ➤ Medial root of median

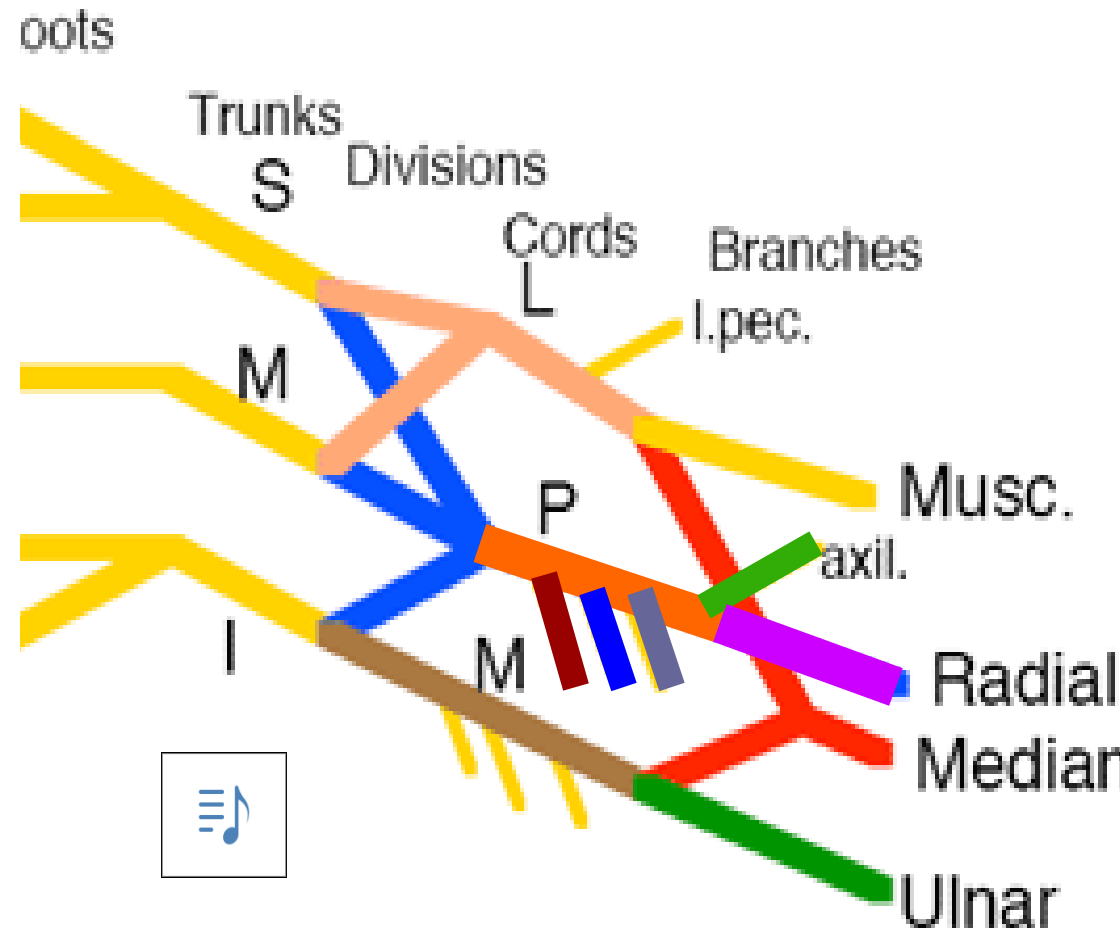
#### ➤ Ulnar nerve



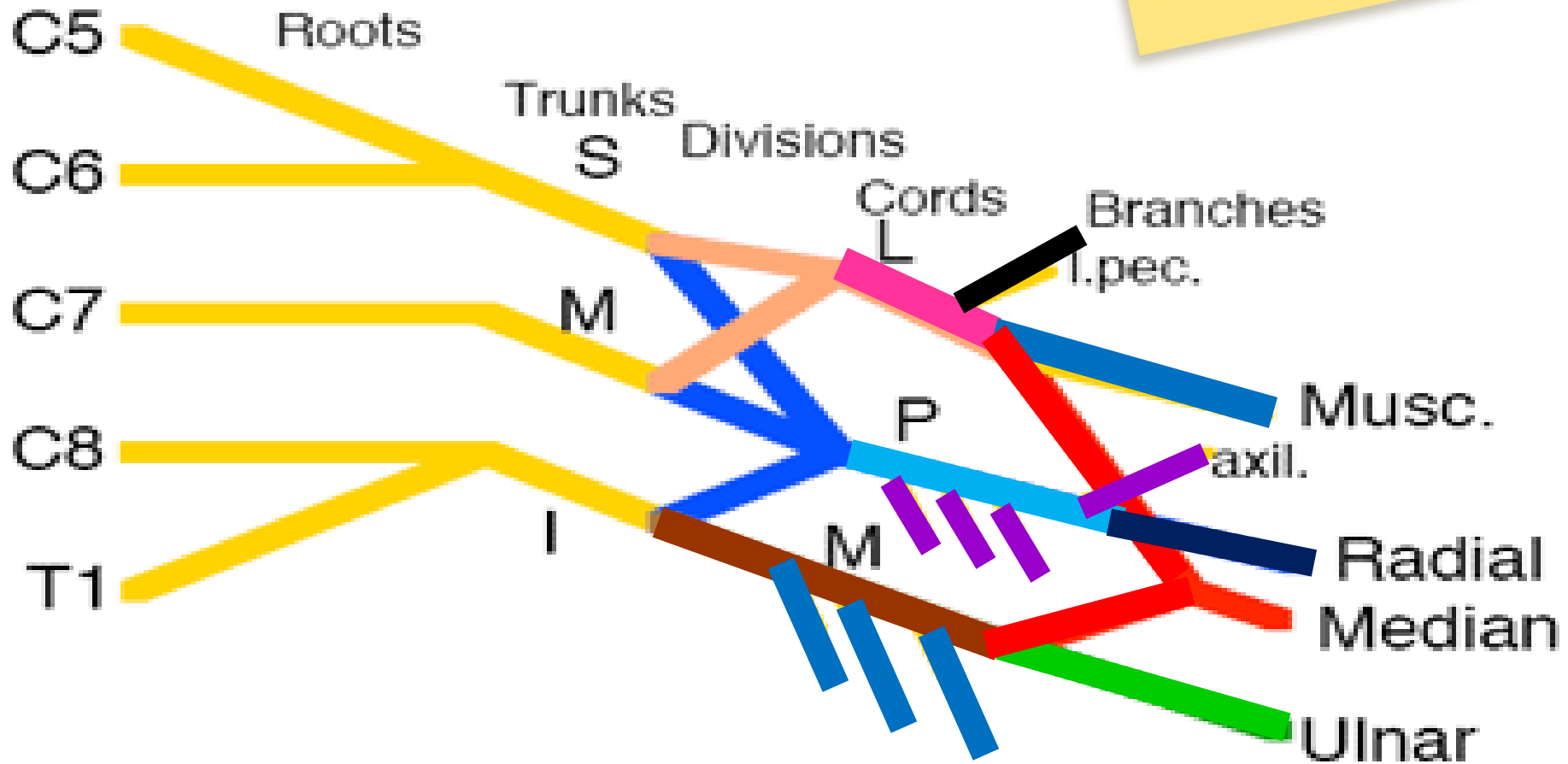
- **Branches from cords :**

### 3) Posterior cord :

- **Upper subscapular**
- **Lower subscapular**
- **Nerve to latissimus dorsi**
- **Axillary nerve**
- **Radial nerve**







- **The posterior cord of the brachial plexus gives the following branches, EXCEPT:**
  - A. Upper & lower subscapular nerves**
  - B. Nerve to serratus anterior**
  - C. Nerve to latissimus dorsi**
  - D. Axillary nerve**
  - E. Radial nerve**



• Which of the following stages of the brachial plexus does not give branches?

**A. Roots**

**B. Trunks**

**C. Divisions**

**D. Cords**





**Suggested Textbook**  
Clinical Anatomy By  
Systems  
Richard S. Snell  
Pages : 609-616